

INDUSTRIAL HARDFACING WIRE

Polymet Alloy	Equivalents		Weld Deposit: Nominal Composition														Rockwell Hardness		Available Forms		Applications
	Description	Stoody	Other	Ni	Co	Fe	Cr	W	Mo	Al	Si	Mn	Nb	Ti	Ta	V	C	Other	Solid Spooled	Cored Spooled	
IRON BASE - TOOL STEELS																					
P♦Met 25	Weld Mold 525			2.0	BAL	1.0	0.8	0.5	1.5								0.08		✓		Sowblocks, Bolsters, Shafts & Rams
P♦Met 43	4130				BAL	1.0	0.2	0.3	0.5								0.30		✓		Die Repairs, Overlays
P♦Met 44	4140				BAL	1.0	0.2	0.3	0.8								0.40		✓		Die Repairs, Overlays
P♦Met 112	H-12, Weld Mold 958				BAL	5.0	1.3	1.0	0.3							0.3	0.35		✓		Dies, Shear Blades, Trimmers
P♦Met 113	H-13, Weld Mold 959				BAL	5.0	1.5	0.8	0.8							1.0	0.35		✓		Forging Dies, Shear Blades & Trimmers
P♦Met 135	Weld Mold 535			2.2	BAL	1.5	1.0	0.5	1.5							0.12			✓		Die Impressions, Rams, Rolls & Bolsters
P♦Met 149	Weld Mold 9650			1.5	BAL	10.0	2.8	0.8	0.7							0.15			✓		Die Impressions, Cavities, Flash Lines
P♦Met 154	Weld Mold 954			1.7	BAL	5.0	2.0	0.3	0.4							0.4			✓		Die Impressions, Cavities, Flash Lines
P♦Met 164	Weld Mold 964			1.0	BAL	11.0	1.0	1.0	1.0							0.5	0.25		✓		Forging Dies for Non-Ferrous Alloys
IRON BASE - CHROMIUM & COMPLEX CARBIDE HARDFACING ALLOYS																					
P♦Met 214	LCr Carbide	121	240		BAL	15.0	0.6	1.5	1.0							4.0	0.2 B		✓		Crusher Cones, Rolls
P♦Met 223	Cr Carbide			3.0	BAL	26.0	0.8	1.6	1.6							1.70			✓		Dredge Components, Crusher Cones, Rolls
P♦Met 225	Cr Carbide	100HC	255		BAL	23.0		1.0	2.0							5.50			✓		Dredges, Mantles, Coal Crushers
P♦Met 227	HCr Carbide	101HD			BAL	27.0		1.0	2.8							7.10			✓		Hardfaced Plate & Pipes
P♦Met 229	Cr Carbide	100HD			BAL	29.5		0.5	2.5							6.00			✓		Hardfaced Plate & Pipes, Chutes, Pulverizer Rolls
P♦Met 260	Complex Carbide	Super 20			BAL	21.0	4.0	1.2	0.5	6.0						5.80			✓		Worm Segments & Wear Bars for Presses in Rendering Processes
P♦Met 263	Complex Carbide	143			BAL	23.0		0.5	0.5	8.0						5.20			✓		Mixer Blades & Paddles, Coal & Cement Piping Elbows
P♦Met 265	Complex Carbide	145			BAL	23.0	2.0	6.0	1.0	5.0						5.60			✓		Sinter Crushers, Wear Bars & Plates, Cement Kilns
P♦Met 272	Fe Cr B Si	Armacor M			BAL	29.0		1.25									3.7 B		✓		High Wear Applications
P♦Met 275	Ti Carbide	600	258		BAL	7.0	1.8	0.8	1.5			6.5				2.00			✓		Crushers, Cylinders & Hammers, Core Knives & Shredders
P♦Met 285	Van Carbide	Van Car		0.5	BAL		6.0	0.5	1.0							16.0			✓		Auger Bits, Ammonia Injectors, Ripper Teeth & Shanks
P♦Met 295	Tung Carbide	130	WC-0		BAL	6.0	1.0	0.5	1.0							1.0	46 WC		✓		Tools, Bucket Lips
P♦Met 296	Fe Cr Ni B	Armacor 16		6.0	BAL	23.0	3.5	2.0	1.0								2.0 Cu, 2.5 B		✓		High Corrosion & Wear
NICKEL BASE ALLOYS																					
P♦Met 818	Inconel 718			BAL	1.0*	17.0	19.0	3.0	0.6	35*	0.35*	5.1	0.9				0.08*		✓		Turbine Frames & Casings
P♦Met 860	Inconel 625			BAL	1.0*	5.0*	21.5	9.0	0.4*	0.5*	0.5*	3.6	0.4*				0.08*		✓		Oxidation Resistance, Turbine Engines
P♦Met 862	Deloro 60			BAL		3.5	15.5			4.0							0.80	3.0B	✓		Wear & Corrosion, Molds, Plungers
P♦Met 868	Hastelloy B2			BAL	1.0*	2.0*	1.0*			28.0	0.1*	1.0*							✓		Resistance to Strong Reducing Corrosives
P♦Met 871	T700			BAL		15.0		32.0		3.5	3.0	0.75*	0.3*				0.10*		✓		Nuclear Valve Applications
P♦Met 876	C276			BAL	0.12*	3.0*	20.0			0.5*	3.0	0.75*	0.3*						✓		Resistance to Reducing/Oxidizing Corrosives
P♦Met 882	Inconel FM 82			BAL	0.12*	3.0*	20.0			0.5*	3.0	0.75*	0.3*						✓		Hot Section Components
P♦Met 896	Nickel Carbide			BAL	2.0	2.0	4.5	1.0										35 WC	✓		High Corrosion & Wear
COBALT BASE ALLOYS																					
P♦Met 901	Alloy 1			BAL		30.0	12.0										2.40		✓		Valves, Saw Teeth, Cutters
P♦Met 906	Alloy 6			BAL		27.0	4.0										1.00		✓		Turbine Engine Parts, Valves, Knives
P♦Met 912	Alloy 12			BAL	2.5	29.0	8.0										1.50		✓		Turbine Engine Components
P♦Met 921	Alloy 21			BAL		28.0		5.0								0.20			✓		Valves, Dies, Impellers
P♦Met 922	ASTM-F75			BAL		28.0		5.5								0.25			✓		Orthopedic Implants*
P♦Met 930	Alloy 190			BAL	3.0*	26.0	14.0										3.20		✓		Oil Drilling Rock Bits
P♦Met 931	Alloy 31			BAL		25.0	7.5			0.7	0.7					0.51			✓		Blade Z Notch Repairs
P♦Met 945	T400			BAL		8.0	29.0			2.6	2.6					0.08			✓		Bearing Journals
P♦Met 980	T800			BAL		17.5	29.0			3.5	3.5					0.04			✓		Blade Z Notch Repairs

*Maximum **Hardness of Matrix, Carbide Hardness is >70 C ***Brinell
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